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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 20

Application Number: 09/516,288
Filing Date: March 01, 2000
Appellant(s): JONES, MARTIN KELLY

Scott A. Horstemeyer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09 September 2003 (paper #19).

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-37 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

US 6,006,159 A	12-1999	Schmier et al.
US 5,122,959 A	06-1992	Nathanson et al.
US 4,297,672	10-1981	Fruchey et al.
US 5,153,842 A	10-1992	Dlugos et al.

Hitchcock, Nancy. "The Big Hiccup". April 1996; Apparel Industry Magazine; v57n4 pp 16-28.

Bar Code (anonymous). June 1999; Automatic ID News; v15n7.

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmier et al. (US 6,006,159) in view of Dlugos Sr. et al. (US 5,153,842), and further in view of Applicant's own admission.

Claims 1, 24, and 26:

Schmier inherently discloses the use of a memory device, given that Schmier discloses a processor. Schmier does not disclose *memory storing a vehicle schedule.* However, Applicant, on page 2, lines 9-12, cites a routine schedule for package delivery. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Storing the schedule on a memory device provides a convenient way to access and modify vehicle routines and schedules. Since package delivery and passenger delivery

are similar in intent and purpose, applying the techniques and procedures to each are intuitive as well as cross-functional. In addition, Schmier does not disclose a *said vehicle schedule identifying packages that are to be delivered by a vehicle during a first time period.* However, Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address at a certain time on a certain day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery to the customer.

With regard to the limitation of:

- *indicating an order that said vehicle is expected to deliver said packages,* Schmier discloses a public transit vehicle arrival information system and a route information and schedule (column 4, lines 17-20).
- *a first communications device configured to establish communication with remote communications devices,* Schmier discloses a processor in each vehicle with GPS, PLSS and other sensor information as inputs and a transceiver for communication outside of the vehicle to a central processor (column 3, lines 51-59).

- *a system manager configured to analyze said vehicle schedule and to determine, based on said order, a second time period that said vehicle is expected to deliver one of said packages,* Schmier discloses an updated schedule based on the processor broadcasts (column 4, lines 51-60).
- *said system manager further configured to transmit a notification message via said first communications device,* Schmier discloses a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60).
- *said notification message identifying said second time period,* Schmier discloses an updated schedule based on the processor broadcasts (column 4, lines 51-60). Naturally, the update may be a revised time of arrival.

Schmier does not disclose that *wherein said second time period is within said first time period.* However, Applicant, on page 2, lines 1-5, does disclose that a package is not only promised on a certain day, but also within a time frame during the day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery system for

the recipients. If a shipping company can promise a package during a smaller time interval, the value to the customer is increased. Naturally, as the system updates the arrival time as disclosed above by Schmier, the accuracy of the second time period increases.

Schmier is not directed specifically at delivering packages, although there are sufficient similarities between delivering packages and people for one industry to borrow successful techniques from the other, and vice versa. Dlugos discloses, "Shipment of a parcel requires that information accompany the parcel as it is prepared for shipment, picked up by the carrier, transported, sorted, delivered to the recipient, unpacked, and so forth. The accompanying information (hereinafter called "parcel information") often falls into the following categories, among others: name and address of sender; name and address of recipient; routing codes; parcel identification number; name of carrier; date of shipment; C.O.D. amount; amount of declared value or insurance; shipping charges including charges for special services such as C.O.D. or declared value; purchase order number, date, etc.; invoice number, date, amount, etc.; packing list; and picking list. The accompanying information is commonly in the form of alphanumeric characters printed on a label that is affixed to the parcel or on a piece of paper packed inside the parcel or carried along with the parcel. A limited amount of information, such as the routing code or the parcel identification number, may be printed in bar coded form on the parcel or on a label that is then affixed to the parcel" (column 1, lines 5-27). Substituting a package for a

passenger, the technique of Schmier would be applied to the delivered package, such as routing schedules, delivery times and updates, proximity alerts, and delivery data. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system of Dlugos because It to provides a more convenient and efficient form in which to transport information related to and accompanying parcels" and "a more convenient form in which to store information relating to the contents of a storage location for goods" (Dlugos, column 2, lines 39-45).

Claims 2, 25, and 36:

Schmier/Dlugos/Applicant combine to teach the limitations as recited in claim 1. Schmier/Dlugos/Applicant do not specifically disclose that *said notification message is an e-mail message.* Schmier, however, does disclose that a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60). Specially addressable displays include email addresses, inherently indicating that updated transit times can be sent to recipients via an email provider, the remote device receiving the email being the recipient's computer.

Claims 3 and 27:

Schmier/Dlugos/Applicant combine to teach the limitations as recited in claim 1. Schmier/Dlugos/Applicant do not specifically disclose that *said first time period is a day.* However, Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address on a certain day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee delivery days, thereby providing a more efficient delivery service to the customer.

Claim 4:

Schmier/Dlugos/Applicant combine to teach the limitations as recited in claim 1. Schmier/Applicant do not specifically disclose that *said vehicle schedule identifies each recipient that is to receive at least one of said packages.* It is inherent, though, to identify the recipient along with the delivery schedule, since the schedule is a record and a plan of all delivery stops to the recipients of the packages that are to be delivered. Obviously, without a recipient, there would be no delivery. In addition, Dlugos discloses parcel information, as shown in the rejection of claim 1 above.

Schmier/Dlugos/Applicant combine to teach the limitations as recited in claim 1. With regard to the limitation of *said notification message identifying each of said packages to be received by one of said recipients during said first time period,* Applicant discloses that delivery services routinely guarantee

package delivery on a certain day, and that notices are routinely sent to the recipient concerning the delivery (page 2, lines 1-5). In addition, Dlugos discloses parcel information, as shown in the rejection of claim 1 above. Schmier/Dlugos/Applicant do not specifically disclose that the notice is sent regarding all packages to be delivered that day. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the notification message information regarding all package deliveries that, inherently, would arrive at the same time, with the same truck, and the same delivery service. By including in the message all intended deliveries, one message may be sent instead of multiple messages, deceasing possible confusion and redundant information.

Claims 5-7, 9, 10, 12-19, 21, 28, 29, 31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmier/Dlugos/Applicant in view of Hitchcock, "The Big Hiccup (April 1996).

Claims 5 and 28:

As shown in the rejection of claims 1-4 above, the combination of Schmier/Applicant disclose:

- memory storing package data identifying a plurality of packages that are to be respectively delivered to a plurality of recipients (Applicant, on page 2, lines 9-12).

- a first communications device configured to establish communication with remote communications devices (Schmier column 3, lines 51-59).

Schmier/Dlugos/Applicant do not disclose that *a system manager configured to detect when one of said packages has been assigned to a vehicle for delivery to one of said recipients.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

In addition, Schmier/Dlugos/Applicant do not disclose that *said system manager further configured to transmit a notification message via said first communications device in response to a detection that said one of said packages has been assigned to said vehicle.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. Hitchcock also discloses that the trading partners are sent an Automatic Shipping Notice after the truck departs. This links the carton with the truck until the cartoon is unloaded and tells the recipients that the order is on the way. It would be obvious to one of

ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking system of Hitchcock. Sending notifications when the items are onboard and being shipped provides the recipient with near real-time update information, improving customer satisfaction and overall efficiency.

Schmier is not directed specifically at delivering packages, although there are sufficient similarities between delivering packages and people for one industry to borrow successful techniques from the other, and vice versa. Dlugos discloses, "Shipment of a parcel requires that information accompany the parcel as it is prepared for shipment, picked up by the carrier, transported, sorted, delivered to the recipient, unpacked, and so forth. The accompanying information (hereinafter called "parcel information") often falls into the following categories, among others: name and address of sender; name and address of recipient; routing codes; parcel identification number; name of carrier; date of shipment; C.O.D. amount; amount of declared value or insurance; shipping charges including charges for special services such as C.O.D. or declared value; purchase order number, date, etc.; invoice number, date, amount, etc.; packing list; and picking list. The accompanying information is commonly in the form of alphanumeric characters printed on a label that is affixed to the parcel or on a piece of paper packed inside the parcel or carried along with the parcel. A limited amount of information, such as the routing code or the parcel identification number, may be printed in bar coded form on the parcel or on a label that is then

affixed to the parcel" (column 1, lines 5-27). Substituting a package for a passenger, the technique of Schmier would be applied to the delivered package, such as routing schedules, delivery times and updates, proximity alerts, and delivery data. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system of Dlugos because It to provides a more convenient and efficient form in which to transport information related to and accompanying parcels" and "a more convenient form in which to store information relating to the contents of a storage location for goods" (Dlugos, column 2, lines 39-45).

Claims 6 and 29:

Schmier/Applicant/Dlugos/Hitchcock disclose the system as shown in the rejection of claim 5 above. Schmier/Applicant/Dlugos/Hitchcock do not disclose that *a scanner configured to scan a label of said one package and to identify said one package based on said label, wherein said system manager detects that that said package has been assigned to said vehicle based on whether said scanner has identified said one package.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant/Dlugos and the tracking system of Hitchcock. By scanning

the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

Claims 7 and 31:

Schmier/Applicant/Dlugos/Hitchcock combine to teach the limitations as recited in claim 5. Schmier/Applicant/Dlugos/Hitchcock do not specifically disclose that *said notification message is an e-mail message.* Schmier, however, does disclose that a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60). Specially addressable displays include email addresses, inherently indicating that updated transit times can be sent to recipients via an email provider.

Claims 9 and 33:

Schmier/Applicant/Dlugos/Hitchcock combine to teach the limitations as recited in claim 5. Schmier/Applicant/Dlugos/Hitchcock do not disclose that *said notification message identifies a sender of said one package.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. Hitchcock also discloses that the trading partners are sent an Automatic Shipping Notice (electronic invoice) after the truck departs, inherently disclosing that the sender of the shipment, which is normally included on any typical invoice. It would be obvious to one of ordinary skill in the art at the time of the invention to

combine the package delivery system cited by Schmier/Applicant/Dlugos and Hitchcock's tracking and notification system. Sending notifications when the items are onboard and being shipped provides the recipient with near real-time update information, improving customer satisfaction and overall efficiency.

Claim 10:

Schmier/Applicant/Dlugos/Hitchcock combine to teach the limitations as recited in claim 5. Schmier/Applicant/Dlugos/Hitchcock do not disclose *said package data indicates that said packages are to be delivered by said vehicle.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded (see the rejection of claim 6 above). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant/Dlugos and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

In addition, Schmier/Applicant/Dlugos/Hitchcock do not disclose *indicates an order that said vehicle is expected to deliver said packages.* However, Schmier does disclose a public transit vehicle arrival information system and a route information and schedule (column 4, lines 17-20). See the rejection of claim 1 above.

Furthermore, Schmier/Applicant/Dlugos/Hitchcock do not disclose *wherein said system manager is further configured to determine, based on said order, that said one package is expected to be delivered during a particular time period,* Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address at a certain time on a certain day (see the rejection of claim 1 above). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant and the tracking system of Hitchcock. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery to the customer.

Additionally, Schmier/Applicant/Dlugos/Hitchcock do not disclose *said notification message indicating that said one package is expected to be delivered during said particular time period.* However, Schmier discloses a transit data table that is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60).

Claim 12:

With regard to the limitation of:

- *receiving a plurality of packages,* it is inherent that a package delivery system would receive a plurality of packages for delivery.

- *determining an order that said vehicle is to deliver said packages,* Schmier discloses a public transit vehicle arrival information system and a route information and schedule (column 4, lines 17-20).
- *causing a notification message to be transmitted to said recipient based on said determining a first time period step,* Schmier discloses a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60).
- *indicating said first time period via said notification message,* it is obvious to inform the recipient of the estimated time of arrival while informing the recipient of the arrival of the package.
- *simultaneously transporting each of said packages via said vehicle,* it is obvious to have each of the packages on board the vehicle when the notice is sent that the packages are on their way.
- *transporting said one package to a premises of said recipient via said vehicle,* it is inherent to a delivery service to deliver the package to the recipient using the delivery vehicle.

Schmier/Applicant/Dlugos do not disclose *assigning each of said packages to a vehicle.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant/Dlugos and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

In addition, Schmier/Dlugos does not disclose *determining, based on said order, a first time period that said vehicle is expected to deliver one of said packages to a recipient.* However, Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address at a certain time on a certain day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier/Dlugos with the package delivery system cited by the Applicant. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery to the customer.

Schmier is not directed specifically at delivering packages, although there are sufficient similarities between delivering packages and people for one industry to borrow successful techniques from the other, and vice versa. Dlugos discloses, "Shipment of a parcel requires that information accompany the parcel

as it is prepared for shipment, picked up by the carrier, transported, sorted, delivered to the recipient, unpacked, and so forth. The accompanying information (hereinafter called "parcel information") often falls into the following categories, among others: name and address of sender; name and address of recipient; routing codes; parcel identification number; name of carrier; date of shipment; C.O.D. amount; amount of declared value or insurance; shipping charges including charges for special services such as C.O.D. or declared value; purchase order number, date, etc.; invoice number, date, amount, etc.; packing list; and picking list. The accompanying information is commonly in the form of alphanumeric characters printed on a label that is affixed to the parcel or on a piece of paper packed inside the parcel or carried along with the parcel. A limited amount of information, such as the routing code or the parcel identification number, may be printed in bar coded form on the parcel or on a label that is then affixed to the parcel" (column 1, lines 5-27). Substituting a package for a passenger, the technique of Schmier would be applied to the delivered package, such as routing schedules, delivery times and updates, proximity alerts, and delivery data. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system of Dlugos because It to provides a more convenient and efficient form in which to transport information related to and accompanying parcels" and "a more convenient form in which to store

information relating to the contents of a storage location for goods" (Dlugos, column 2, lines 39-45).

Claim 13:

Schmier/Applicant/Dlugos/Hitchcock combine to teach the limitations as recited in claim 12. Schmier/Applicant/Dlugos/Hitchcock do not specifically disclose that *said notification message is an e-mail message.* Schmier, however, does disclose that a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60). Specially addressable displays include email addresses, inherently indicating that updated delivery times can be sent to recipients via an email provider.

Claim 14:

With regard to the limitation of *determining whether each of said packages is expected to be delivered during a second time period,* Schmier discloses an updated schedule based on the processor broadcasts (column 4, lines 51-60). Naturally, the update may be a revised time of arrival.

Schmier/Applicant/Dlugos do not disclose that *performing said assigning step based on said determining whether step.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary

skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant/Dlugos and the tracking system of Hitchcock. Although Hitchcock does not specifically disclose that a package is assigned to a truck after a revised delivery time is scheduled, it would have been obvious to one of ordinary skill in the art to reassign the package to another truck if the time of delivery is changed or altered in some way. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction. Scanning items as they are brought off of delivery trucks and placed onto other trucks, accuracy in delivery and positive inventory control may be maintained, which also increases the efficiency of the system.

Schmier does not disclose that *wherein said first time period is within said second time period.* However, Applicant, on page 2, lines 1-5, does disclose that a package is not only promised on a certain day, but also within a time frame during the day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery system for the recipients. If a shipping company can promise a package during a smaller time interval, the value to the customer is increased. Naturally, as the system updates the arrival time as disclosed above by Schmier, the accuracy of the second time period increases. If for some reason a package cannot be delivered

at a promised time, then a secondary time may be relied upon for notification purposes, thereby maintaining customer satisfaction and delivery efficiency.

Claim 15:

Schmier/Applicant/Dlugos/Hitchcock combine to teach the limitations as recited in claim 14. Schmier/Applicant/Dlugos/Hitchcock do not specifically disclose that *said second time period is a day.* However, Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address on a certain day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee delivery days, thereby providing a more efficient delivery service to the customer.

Claim 16:

With regard to the limitation of:

- *receiving a package for delivery to a premises of a recipient,* , it is inherent that a package delivery system would receive a package for delivery.
- *transporting said package to said premises via said vehicle,* it is inherent to a delivery service to deliver the package to the recipient using the delivery vehicle.

Schmier/Applicant do not disclose *assigning said package to a vehicle.* However, Hitchcock, on page 3, discloses using a barcode label and scanning

system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

Schmier/Applicant do not disclose that *detecting when said package is assigned to said vehicle.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction.

In addition, Schmier/Applicant do not disclose *producing a notification message in response to said detecting step, said notification message indicating a time period in which said package is expected to be delivered at said premises.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. Hitchcock also discloses that the trading partners are sent an Automatic Shipping Notice after the truck departs. This links the carton with the

truck until the cartoon is unloaded and tells the recipients that the order is on the way. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Applicant and the tracking system of Hitchcock. Sending notifications when the items are onboard and being shipped provides the recipient with near real-time update information, improving customer satisfaction and overall efficiency.

Furthermore, Schmier/Applicant do not disclose *said notification message indicating a time period in which said package is expected to be delivered at said premises.* However, Applicant, on page 2, lines 1-4, discloses that a package is guaranteed to be delivered to an address at a certain time on a certain day. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system cited by the Applicant. Shipping companies routinely guarantee a delivery time, thereby providing a more efficient delivery to the customer.

Schmier/Applicant do not disclose *transmitting said notification message to a communications device located at said premises.* However, Schmier does discloses sending a page to the recipient (column 5, lines 8-10), sending information on the Internet and the World Wide Web, inherently disclosing sending the information to the premises (column 6, lines 61-65), and any number of other personal communication systems (column 7, lines 2-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the notification systems of Schmier with the Applicant's product delivery

system because sending notifications directly to the premises wherein the recipient is located provides good customer service by saving the recipient time and preventing possible confusion.

Schmier is not directed specifically at delivering packages, although there are sufficient similarities between delivering packages and people for one industry to borrow successful techniques from the other, and vice versa. Dlugos discloses, "Shipment of a parcel requires that information accompany the parcel as it is prepared for shipment, picked up by the carrier, transported, sorted, delivered to the recipient, unpacked, and so forth. The accompanying information (hereinafter called "parcel information") often falls into the following categories, among others: name and address of sender; name and address of recipient; routing codes; parcel identification number; name of carrier; date of shipment; C.O.D. amount; amount of declared value or insurance; shipping charges including charges for special services such as C.O.D. or declared value; purchase order number, date, etc.; invoice number, date, amount, etc.; packing list; and picking list. The accompanying information is commonly in the form of alphanumeric characters printed on a label that is affixed to the parcel or on a piece of paper packed inside the parcel or carried along with the parcel. A limited amount of information, such as the routing code or the parcel identification number, may be printed in bar coded form on the parcel or on a label that is then affixed to the parcel" (column 1, lines 5-27). Substituting a package for a passenger, the technique of Schmier would be applied to the delivered

package, such as routing schedules, delivery times and updates, proximity alerts, and delivery data. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the passenger delivery system of Schmier with the package delivery system of Dlugos because It to provides a more convenient and efficient form in which to transport information related to and accompanying parcels" and "a more convenient form in which to store information relating to the contents of a storage location for goods" (Dlugos, column 2, lines 39-45).

Claim 17:

Schmier/Dlugos/Applicant/Hitchcock disclose the system as shown in the rejection of claim 16 above. Schmier/Dlugos/Applicant/Hitchcock do not disclose *scanning a label of said package, wherein said detecting step further includes the step of detecting said scanning step.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. This links the carton with the truck until the cartoon is unloaded. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking system of Hitchcock. By scanning the items as they are placed onto the trucks, accuracy in delivery is increased which improves customer satisfaction. Inherently, as each carton or package is scanned, the report is sent to a central database for storage.

Claim 18:

Schmier/Dlugos/Applicant/Hitchcock do not specifically disclose:

- *storing data indicating whether said package is assigned to a vehicle.* However, it is inherent to all delivery systems to store a record of their deliveries. It would be obvious to one of ordinary skill in the art at the time of the invention to store the delivery and tracking data because tracking inventory and delivery status requires some form of a database storage system.
- *analyzing said data.* However, it is inherent to all delivery companies to analyze data regarding delivery of packages at least to the degree of ensuring that all mailing addresses are complete and accurate. It would be obvious to one of ordinary skill in the art at the time of the invention to analyze delivery data and status because delivery companies also routinely analyze tracking data when inventories are moved or shipped.
- *performing said detecting step based on said analyzing step.* However, it is inherent that all delivery systems ensure that each package is properly placed onboard the correct truck. It would be obvious to one of ordinary skill in the art at the time of the invention to detect whether a package is on the

proper vehicle after examining the delivery data because delivering packages late or not at all decreases customer satisfaction and reduces efficiency.

Claim 19:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitations as recited in claim 16. Schmier/Applicant/Hitchcock do not specifically disclose that *said notification message is an e-mail message.* Schmier, however, does disclose that a transit data table which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60). Specially addressable displays include email addresses, inherently indicating that updated delivery times can be sent to recipients via an email provider.

Claim 21:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitations as recited in claim 16. Schmier/Dlugos/Applicant/Hitchcock do not disclose that *said notification message identifies a sender of said one package.* However, Hitchcock, on page 3, discloses using a barcode label and scanning system to track each shipping cart as it is loaded on to a truck for delivery to the recipient. Hitchcock also discloses that the trading partners are sent an Automatic Shipping Notice (electronic invoice) after the truck departs, inherently disclosing that the sender of the shipment, which is normally included on any typical invoice. It

would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and Hitchcock's tracking and notification system. Sending notifications when the items are onboard and being shipped provides the recipient with near real-time update information, improving customer satisfaction and overall efficiency.

Claims 8 and 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmier/Dlugos/Applicant/Hitchcock in view of Bar Code (June 1999).

Claims 8 and 30:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitations as recited in claim 5. Schmier/Dlugos/Applicant/Hitchcock do not specifically disclose that *said package data indicates whether said one package has been assigned to said vehicle and said system detects when said one package has been assigned to said vehicle by analyzing said package data.* Bar Code, however, does disclose the use of RF ID tags that are a form of labeling using electronic labels. Inherently, any unique identifier and associated information may be placed on to the electronic label, such as vehicle and container ID's, recipients, senders and their associated addresses. All data encoded onto the RF ID tag is accessible from a specialized RF tag reader (pages 7-8). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking system of Hitchcock with the RF ID system of Bar Code. The RF ID

system provides accurate and timely information regarding the processing of shipped goods, thereby increasing efficiency and productivity.

Claims 11, 20, 32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmier/Applicant/ Hitchcock in view of Fruchey et al. (US 4,297,672).

Claims 11 and 20, 32, and 37:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitations as recited in claims 5 and 16. Schmier/Dlugos/Applicant/Hitchcock do not specifically disclose that *said system manager is further configured to determine when said vehicle is within a predefined proximity of a premises of said one recipient based on signals transmitted from said vehicle, said system manager further configured to transmit a second notification message when said vehicle is within said predefined proximity.* Fruchey, however, in column 1, lines 63-68 does disclose a separate signal which triggers an alarm when a transport vehicle is within a predetermined pick up area. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking system of Hitchcock with the proximity alarm system of Fruchey. Although Fruchey dos not explicitly disclose that the signal triggers a second notification message, it would be a minor modification to the Schmier/Dlugos/Applicant/Hitchcock system to include the proximity indicator used in conjunction with the tracking system to provide a

second signal to announce in advanced the approach of the vehicle to the responsible party, providing a valuable customer service and a more efficient delivery system. In addition, Schmier, discloses a transit data table, which is broadcast with information regarding the transit and arrival times of the vehicles from the central processor (column 4, lines 22-40) to the serviceable transit area and to specially addressable displays (column 4, lines 54-60). Specially addressable displays include email addresses, inherently indicating that updated transit times can be sent to recipients via an email provider, the remote device receiving the email being the recipient's computer.

Claims 22, 23, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmier/Applicant/ Hitchcock in view of Nathanson et al. (US 5,122,959).

Claims 22 and 34:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitation of sending a notification message as recited in claim 16. Schmier/Dlugos/Applicant/Hitchcock do not specifically disclose the *step of indicating, via said notification message, a weight of said package.* Nathanson, however, in column 2, lines 65-68, does disclose ensuring that the vehicle can handle the weight of the package, inherently disclosing that the weight of the package is known. It would be obvious to one of ordinary skill in the art at the time of the invention to combine the package delivery system cited by Schmier/Dlugos/Applicant and the tracking and notification system of Hitchcock

with the load weight as described by Nathanson to inform the recipient of the weight of the arriving package. Notifying recipients of the status and specifications of a delivery in advance permits the recipient to prepare for the delivery, minimizing possible confusion and inefficiency.

Claims 23 and 35:

Schmier/Dlugos/Applicant/Hitchcock combine to teach the limitations as recited in claim 16. Schmier/Dlugos/Applicant/Hitchcock do not specifically disclose *maintaining a web page* or *receiving contact information via said web page*. However, Schmier discloses *maintaining a web page,* communicating transit updates to the Internet and World Wide Web (column 6, lines 62-65), inherently disclosing a web page or web site. Nathanson discloses a network (column 2, lines 54-58), inherently disclosing Internet capabilities. Nathanson also discloses pick up and delivery information contained on the computer network. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Schmier/Dlugos/Applicant/Hitchcock use of the Internet with Nathanson's use of delivery information because using a computer network to organize, track, and maintain deliveries over the Internet is efficient and uncomplicated system for managing a distribution service.

The combination of Schmier/Dlugos/Applicant/Hitchcock/Nathanson as shown above does not specifically disclose *utilizing said contact information to perform said transmitting step*. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the contact and

delivery information on the web site databases to contact the recipients and inform them that a package is on the way. Inherently, when a delivery notification is sent, it must be sent to the proper recipient. Retrieving the contact information from the system web page is an efficient and effortless way to ensure that the messages are sent to the right people.

(11) Response to Argument

Issue 1 – Group A: Claims 1-4 and 36

With respect to claims 1-4 and 36, Appellant asserts that (a) *the combination of references fails to teach each and every element of claim 1.* The Examiner respectfully refutes this assertion and points to the rejection of claim 1 above.

Appellant also asserts that (b) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned,*** in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of

delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (c) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package

labeling system of Dlugos and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, and the Appellant's own admissions.

Issue 1 – Group B: Claims 24-27

With respect to claims 24-27, Appellant asserts that (a) *the combination of references fails to teach each and every element of claim 24.* The Examiner respectfully refutes this assertion and points to the rejection of claim 1 above.

Appellant also asserts that (b) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival

> times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to

solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (c) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos and the delivery techniques of Schmier, the problems

associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, and the Appellant's own admissions.

Issue 2 – Group C: Claims 5-7, 9, and 10

With respect to claims 5-7, 9, and 10, Appellant asserts that (a) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status

> information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a

convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (b) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and

increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 2 – Group D: Claims 12-15

With respect to claims 12-15, Appellant asserts that (a) *the combination of references fails to teach each and every element of claim 12.* The Examiner respectfully refutes this assertion and points to the rejection of claim 12 above.

Appellant also asserts that (b) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the

> transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the

public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (c) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by

inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 2 – Group E: Claims 16-19 and 21

With respect to claims 16-19 and 21, Appellant asserts that (a) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit

> vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be

adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (b) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy.

Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 2 – Group F: Claims 28, 29, 31, and 33

With respect to claims 28, 29, 31, and 33, Appellant asserts that (a) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week,

> date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (b) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 3 – Group G: Claims 8 and 30

With respect to claims 8 and 30, Appellant asserts that (a) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display

> modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (b) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can

only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier and the barcode-based warehouse and delivery management system of Hitchcock, as well as the supplementary teachings of Bar Code teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock and Bar Code, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 4 – Group H: Claims 11, 20, 32, and 37

With respect to claims 11, 20, 32, and 37, Appellant asserts that (a) *the combination of references fails to teach each and every element of claim 11.* The Examiner respectfully refutes this assertion and points to the rejection of claim 12 above.

Appellant also asserts that (b) *Schmier and Fruchey are not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit

> vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be

adequately employed by the other to solve similar problems. This makes Schmier analogous art.

With regard to Fruchey, the Examiner points to column 1, lines 63-67:

> "In general, a radio signaling system for providing advanced warning of an approaching transportation vehicle to passengers within a plurality of predesignated pickup region includes a transmitting system on the vehicle and a receiving system in proximity to one of the predesignated pickup regions."

For the same reasons as shown above in the analogy of Schmier to the Appellants invention, Fruchey is shown to also be analogous. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Fruchey analogous art.

Appellant also asserts that (c) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier/Fruchey and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, and the tracking system of Hitchcock, and the delivery techniques of Schmier/Fruchey, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Fruchey, Dlugos, Hitchcock, and the Appellant's own admissions.

Issue 5 – Group I: Claims 22, 23, 34, and 35

With respect to claims 22, 23, 34, and 35, Appellant asserts that (a) *the combination of references fails to teach each and every element of claim 23.* The Examiner respectfully refutes this assertion and points to the rejection of claim 12 above.

Appellant also asserts that (b) *Schmier is not analogous art.* The Examiner respectfully disagrees. It has been held that a prior art reference must either be in the field of Appellant's endeavor or, if not, then be ***reasonably pertinent to the particular problem with which the applicant was concerned***, in order to be relied upon as a basis for rejection of the claimed invention (emphasis added). See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, The Appellant cites *In re Clay,* 966 F.2d 656,659 (fed. Cir. 1992), stating that " A reference is reasonably pertinent if...it is one which, because of the matter with which it deals, logically would have commended itself to an inventors attention in considering his problem." The Examiner agrees and points to the abstract of Schmier:

> "A system for notifying passengers waiting for public transit vehicles of the status of the vehicles, including the arrival times of vehicles at stops. The system includes global position determining devices located in the vehicles for determining the location of the vehicles along their routes. A central processor or computer is coupled to the global position determining devices for receiving the locations of vehicles therefrom. The processor is programmed to compute and update from the present location of the transit system vehicles and electronically stored information a transit data table which includes status information for all the vehicles in the system, including the location of scheduled stops, connections to other transit vehicles at the stops, and the arrival times of vehicles at their stops. The vehicle status and other information, including news and advertisements are then made available for public access in a manner geared to the locations of the vehicles, the time of day, day of week, date, location, season, holiday, weather etc. Portable access means such as pagers, notebook and palm computers and telephones and stationary access means such as personal computers and telephones and display modules in communication with the central processor, receive the computed arrival time and other information for

> selected routes, stops, etc. from the central processor, and communicate the information to the passenger(s)."

It is clear by this citation that it would be an obvious and logical modification to use the same public transport system to deliver packages instead of people, since the public passenger transport system could easily be modified to solve the problem of delivering packages as declared by the Appellant's application. The same concepts, such as notifications, routes and routing schedules, delivery updates, and information access/transmission, could easily be applied to delivering parcels. One need look no farther than the airline industry, which use large planes to carry travelers as well as packages, sometimes separately, and sometimes simultaneously. In this particular instance, one of ordinary skill in the art that is concerned with the problem of delivering packages would logically look to passenger delivery techniques to solve this problem, and would ultimately find that the techniques employed by the public passenger transportation system would conveniently mesh with the requirements of the package delivery arts. These commonalties between the public passenger transportation system and the package delivery system show a convergence of solutions, inasmuch as the techniques of one system could be adequately employed by the other to solve similar problems. This makes Schmier analogous art.

Appellant also asserts that (c) *the references cited offer no suggestion or motivation for their combination.* The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to

produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the techniques of delivering packages, as shown in the Appellants own disclosure, and in Dlugos, coupled with the delivery techniques of Schmier, the transportation dispatch and delivery system of Nathanson, and the barcode-based warehouse and delivery management system of Hitchcock, teach a well-rounded and informed system for facilitating the delivering packages faster, more accurately, and for less cost, and the associated problems of accomplishing these goals. By uniting the techniques that are already well-known in the industry, as the Appellant points out in the background of the disclosure, with the informational package labeling system of Dlugos, the dispatch and delivery system of Nathanson, the tracking system of Hitchcock, and the delivery techniques of Schmier, the problems associated with delivery of parcels and packages are addressed in a such a way as to limit waste caused by inefficiencies within the system. This promotes good customer relations and increased profitability, which are the goals of and rational business strategy. Hence, it is proper to combine the teachings of Schmier, Dlugos, Hitchcock, Nathanson, and the Appellant's own admissions.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

James A. Reagan - Examiner

JAR
November 10, 2003

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